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## DOWNY PSYLLID OF ALDER, *PSYLLA FLOCCOSA*, NEW SPECIES.\*

BY EDITH M. PATCH, ORONO, MAINE.

The Psyllid under consideration has been conspicuous upon the alder (*Alnus incana*, Willd.) each season during my acquaintance with the vicinity of Orono, Maine. As the host-plant is looked upon as a common nuisance, no attention has been paid to this insect from an economic standpoint, and no further thought was given it except to admire the plummy appearance of the alder tips during June, or to be annoyed because it was impossible to go through this growth without being covered by the somewhat sticky flocculent matter.

This Psyllid was found to be convenient to use in connection with a study in wing venation,† but it was not until that paper was about ready for press that I tried to determine the species, and found that it was undescribed, for America at least. The Psyllid was named in that paper, and the description held until the present season should give opportunities for a few colour and life-history notes.

If the fact that I am not a "Psyllidist" is revealed by the generic characters creeping into the description, the accompanying photographs will perhaps help out the deficiency.

The eggs are probably deposited upon the alder in the fall, as the newly-hatched Psyllids appear about the time the alder leaves are unfolding in the spring, and settle upon the ventral surface of the leaves.

On June 10, 1909, nymphs previous to the last (or pupal) instar were examined. Head and thorax, both dorsal and ventral, were pale green, the abdomen, both dorsal and ventral, was pale yellow. Eyes bright pinkish-red. Tips of antennæ, legs and beak dusky. Wing-pads small and full and not flat upon the dorsum as in the next stage. These nymphs were congregated on young leaves on the ventral side along the ribs. To the naked eye they presented a loose, woolly mass on account

\*Papers from the Maine Agricultural Experiment Station: Entomology, 36.

†Homologies of the Wing-veins of Aphididæ, Psyllidæ, Aleurodidæ and Coccidæ.

of the white secretion. Under a lens the long wax filaments were seen to curl up in a slight curve from the body.

June 26, 1909.—The flat crab-like nymphs in the last or pupal instar are at this date full grown and ready for the transformation. The thin wing-pads lie flat upon the dorsum. Antennæ, legs, wing-pads and tip of abdomen are dark smoky. The general colour of head, thorax and abdomen is green. Antennæ with ten joints. Hind tibiæ and tarsi with spurs similar to those of the adults, but less pronounced. Length of body, 3.19 mm.

At this stage the nymphs are densely covered with a fluffy, silky flocculent mass, and look like walking ostrich-plumes. The ventral surface of the terminal leaves is by this time well filled with the white stuff, as well as the new growth of the twigs for four to six inches from the tip. A heavy storm dissipates this.

June 26, 1909.—The mature winged forms are present in great numbers on the ventral side of leaves, freshly emerged and not yet taken to flight. (Mature specimens dated July 26, 1905, and August 17, 1905, are in the Station collection.) The following colour descriptions are made from fresh material. Older specimens may not retain the same tints:

*Mature Form.*—Length of body of female, 4.2 mm.; male, 3.5 mm. Head, thorax, abdomen clear blue-green. Thoracic lobes and transverse portions of the abdominal segments are tinged with yellow, so that the Psyllid has a yellowish-green appearance. The ocelli are orange-yellow. Antennæ with ten segments; i-ii are pale green, iii-iv-v are whitish with discal joints black, remaining segments are black. The number of antennal joints is not constant, the segmentation varying even on the two sides of the same Psyllid. Ten seems to be the normal number. A single large round sensorium is present at the distal portion of iv, vi, viii and ix of both the male and female; x is tipped with two stout hairs.

Legs have femora green, tibia and tarsus whitish, with black claws. Tibial and tarsal spurs of hind leg black. At the base of the last pair of legs is a pair of prominent green spur-like projections extending caudad. The caudal tip of the abdomen is yellowish-brown.

Along the extreme distal tip of the hind tibia are seven sharp spurs. At the distal tip of the first tarsal joint are two similar spurs.

The wings are uniformly transparent, and are veined as is typical for the genus. All the veins except that of the claval suture are distinct in the fore wing. The veins in the hind wing are almost invisible. Length of fore wing, 5.35 mm.

## EXPLANATION OF PLATE.

*Psylla floccosa*, new species.

1. Fore wing.
2. Hind wing.
3. Genital segment of female.
- 4, 5, 6. Details of foregoing.
7. Genital segments of male.
- 8, 9, 10. Details of foregoing.
11. Front leg.
12. Second leg.
13. Showing ventral spur at base of third leg.
14. Third leg, showing tibial and tarsal spurs.
15. Head of male.
16. Head of female.
17. Nymphs in flocculent mass on terminal leaves of *Alnus incana*,  
June 10, 1909.

## NEW PSEUDOSCORPIONIDA.

BY NATHAN BANKS, EAST FALLS CHURCH, VA.

In the CANADIAN ENTOMOLOGIST for 1891, pp. 161-166, and 1893, pp. 64-67, I described a number of these small Arachnids, and in the Journ. N. Y. Ent. Soc., 1895, pp. 1-13, I presented a review of the forms then known from North America. Since then many specimens and species have been collected, and in these pages ten of the new forms are characterized, and a new genus erected for a form near *Garypus*.

*Chelifer fuscipes*, n. sp.—Cephalothorax and palpi dark brown, fingers more reddish, dorsum of abdomen brown, with a broad pale median stripe, legs brown, paler at tips of some of the joints. Cephalothorax subtriangular, minutely granulate, with a few short, nearly clavate hairs; eyes distinct. Palpi with fine short subclavate hairs, except on fingers, hand and outer side of the tibia, which are simple; trochanters with distinct tubercle behind, femora a little longer than cephalothorax, subpedicellate, largest at middle; tibiæ about as long as femur, pedicellate, evenly convex both sides, but a little broader than femur; hand barely longer than tibiæ, about twice as broad as femur, fingers shorter than hand, stout, curved. Dorsal abdominal scuta finely granulate, outer side very distinctly prolonged behind into acute spines.

Length, 1.8 mm.

From Claremont, Calif. (Baker).

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